

53
C
B3
96. (Amended) A host cell transformed with the DNA construct according to claim 93.

97. (Amended) The host cell according to claim 96, wherein the cell is selected from the group consisting of a bacterial cell, a virus, a yeast cell, and a plant cell.

98. (Amended) A transgenic plant transformed with the DNA construct according to claim 93.

99. (Amended) The transgenic plant according to claim 98, wherein the plant is papaya.

100. (Amended) A transgenic plant seed transformed with the DNA construct according to claim 93.

101. (Amended) The transgenic plant seed according to claim 100, wherein the plant is papaya.

102. (Amended) A DNA construct comprising:
a fragment of a trait DNA molecule which has a length that is insufficient to independently impart a desired trait to plants transformed with said fragment of a trait DNA molecule, wherein the fragment of a trait molecule is derived from a DNA molecule encoding a papaya ringspot virus coat protein and is at least 110 nucleotides in length;

a silencer DNA molecule effective to achieve post-transcriptional gene silencing of said fragment of a trait DNA molecule coupled to said fragment of a trait DNA molecule, wherein said fragment of a trait DNA molecule and said silencer DNA molecule collectively impart the trait to plants transformed with said DNA construct;

a single promoter sequence which effects transcription of the fragment of a trait DNA molecule and the silencer DNA molecule; and

a single termination sequence which ends transcription of the fragment of a trait DNA molecule and the silencer DNA molecule.

Sub C
Sub B

104. (Amended) The DNA construct according to claim 102, wherein said silencer DNA molecule is selected from the group consisting of a viral DNA molecule, a fluorescence protein encoding DNA molecule, a plant-derived DNA molecule, a viral gene silencer, and combinations thereof.

105. (Amended) The DNA construct according to claim 102, wherein said fragment of a trait DNA molecule and said silencer DNA molecule encode RNA molecules which are translatable.

106. (Amended) The DNA construct according to claim 102, wherein the DNA construct has been modified so that said fragment of a trait DNA molecule and said silencer DNA molecule are nontranslatable.

107. (Amended) The DNA construct according to claim 102, wherein said construct effects post-transcriptional gene silencing of the fragment of trait DNA molecule within plants.

108. (Amended) The DNA construct according to claim 102, wherein the fragment of a trait DNA molecule and silencer DNA molecule do not interact with one another.

109. (Amended) The DNA construct according to claim 102, wherein the silencer DNA molecule is positioned 3' to the fragment of a trait DNA molecule.

Sub C
Sub B

111. (Amended) A host cell transformed with the DNA construct according to claim 102.

112. (Amended) The host cell according to claim 111, wherein the cell is selected from the group consisting of a bacterial cell, a virus, a yeast cell, and a plant cell.

113. (Amended) A transgenic plant transformed with the DNA construct according to claim 102.

sub C 114. (Amended) The transgenic plant according to claim 113, wherein the silencer DNA molecule is heterologous to the plant.

115. (Amended) The transgenic plant according to claim 113, wherein the plant is papaya.

116. (Amended) A transgenic plant seed transformed with the DNA construct according to claim 102.

*B6
core* 117. (Amended) The transgenic plant seed according to claim 116, wherein the plant is papaya.

118. (Amended) A method of imparting papaya ringspot virus resistance to a plant comprising:

transforming the plant with the DNA construct according to claim 93, thereby imparting papaya ringspot virus resistance to the plant.

119. (Amended) The method according to claim 118, wherein the plant is papaya.

120. (Amended) A method of imparting papaya ringspot virus resistance to a plant comprising:

transforming the plant with the DNA construct according to claim 102, thereby imparting papaya ringspot virus resistance to the plant.

121. (Amended) The method according to claim 120, wherein the plant is papaya.